The Montgomery County Water Quality Protection Charge

Frequently Asked Questions

Rain and stormwater runoff is an issue few people spend much time worrying about unless they have forgotten an umbrella during a downpour or come home to a flooded basement. However, taking appropriate steps to control stormwater runoff is becoming an extremely important issue for Montgomery County.

Impervious surfaces such as roofs, driveways, parking lots, and streets prevent precipitation from entering the ground and the groundwater where it completes the hydrologic cycle. Instead stormwater is collected and either sent to a stormwater facility or discharged directly to the streams without control. Older, urbanized areas of the county without stormwater controls bear witness to the devastation visited upon nearby stream valleys, which were blasted by incredible volumes of water, sediment, and pollution, changing from gurgling, bucolic streams to 50 foot wide lifeless channels with toppled trees, exposed sewer lines, and deeply cut and eroded banks.

What is the Water Quality Protection Charge (WQPC)?

The WQPC will appear as a line item on property tax bills and will pay for the structural maintenance of stormwater management facilities. The Water Quality Protection Charge is the result of years of study, recommendations and hard work by citizens serving on work groups and task forces, County Council Staff and the Department of Environmental Protection.

Who will pay?

The charge will be paid by all residential property owners and any associated nonresidential property owners.

What are associated nonresidential properties?

An associated nonresidential property is any nonresidential property from which stormwater drains into a stormwater management facility that primarily serves one or more residential properties. Some examples of associated nonresidential properties could be: a restaurant that has a parking lot draining into a neighborhood stormwater pond, a church parking lot draining into a neighborhood pond, or a private school that has sidewalks, parking lots and outbuildings draining to a residential pond or other type of stormwater management structure.

How has the charge been determined?

The charge is based on the average amount of square feet of roof, sidewalk and driveway for a single-family dwelling. Wet weather cannot penetrate these "impervious" surfaces, thereby washing pollutants such as oil and grease from driveways, as well as fertilizers, pesticides, and

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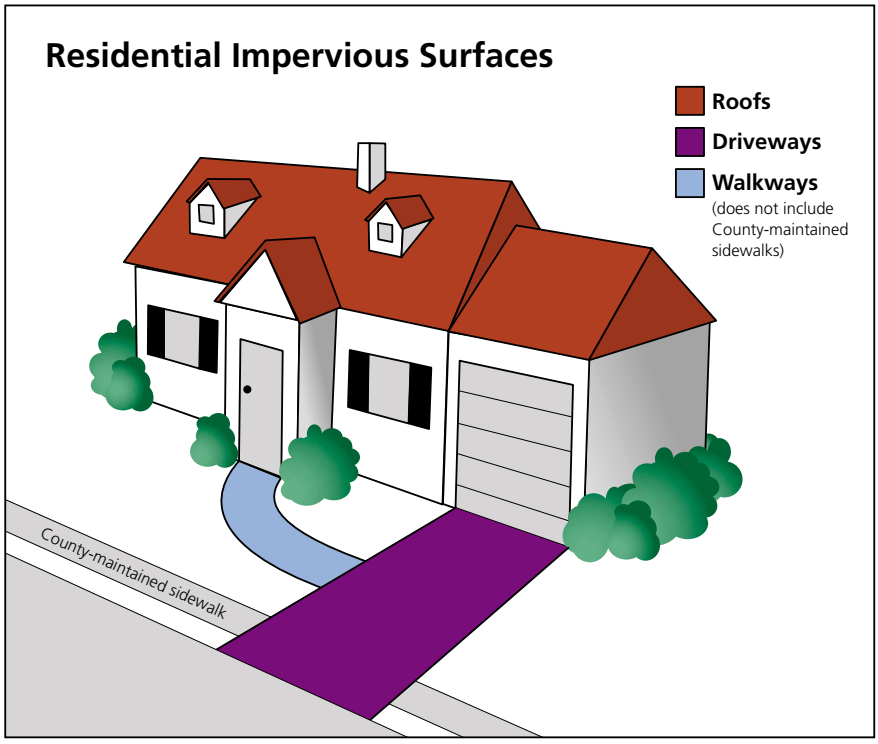


pet waste from yards and turf areas either into nearby streams or into a stormwater management structure. Accumulating stormwater also can erode stream banks if not properly managed by well-maintained ponds, sand filters, infiltration trenches or other stormwater management structures. The average impervious surface has been calculated to be 2,406 square feet and is the Equivalent Residential Unit (ERU) or the base unit for calculating the Water Quality Protection Charge.

Associated nonresidential structures are billed as multiples of the ERU. If a restaurant has 24,060 square feet of imperviousness, then the property owner will pay ten times the ERU.

Condominium and apartment charges will be calculated based on the amount of imperviousness and will be billed as multiples of the ERU. Townhomes will be billed at one-third of an ERU. Commercial and other land use classes that have on-site facilities that do not drain to residential facilities will not pay the charge but will be required to maintain their own structure.

How much is the WQPC?

The WQPC rate is determined by the costs of structural maintenance for residential and associated nonresidential stormwater facilities divided by the number of ERU's. Currently the intent of the law is to perform structural maintenance, although other program aspects, such as inspecting and repairing stormdrains, performing structural maintenance on nonresidential facilities not previously part of the program, and offering incentives through credits and exemptions, could be added to the program.

Additions to the program will require additional increases to the rate. As of March 2002, the proposed rate is $12.75 per ERU. The County Council will set the rate of the Water Quality Protection Charge on an annual basis. A public hearing will be held annually before the Council sets the rate.

What maintenance will be done by the County?

The County will perform structural maintenance on the stormwater facilities. Structural maintenance is defined by the law as: the inspection, construction, reconstruction, modification, or repair of any part of a storm water management facility undertaken to assure that the facility remains in the proper working condition to serve its intended purpose and prevent structural failure. Structural maintenance does not include landscaping, grass cutting, or trash removal.

What maintenance will remain the responsibility of the property owner?

The property owner will be responsible for the aesthetic maintenance around the facility, including trash removal and grass cutting. This routine maintenance is critical and if neglected can lead to expensive maintenance problems that will be the responsibility of the property owner.

Will the County own the property around the facility?

No, the property owner will be responsible for recording easements and covenants in the Montgomery County land records that allow the County to perform the maintenance on the facility.

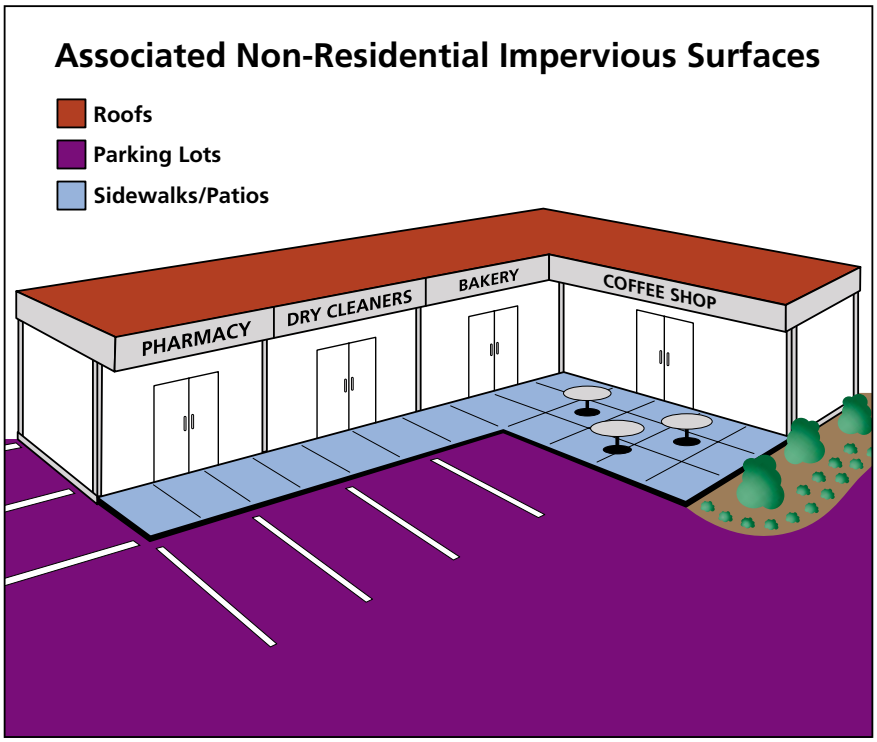
When will the County accept stormwater facilities into the program?

The effective date of the legislation is March 1, 2002. The Department of Environmental Protection (DEP) will be accepting applications beginning on that date. The legislation specifies that any stormwater facilities granted final approval by the Department of Permitting Services up to that date are "existing" stormwater management structures and any facilities granted approval after that date are classified as "new" stormwater management structures.

Existing facilities will have to prepare new easement documents and new facilities will automatically become part of the program.

How will structures enter the County program?

The owner must make any structural repairs needed to place the facility in proper working condition, as determined by the Department of Environmental Protection usually to asbuilt standards if available, before the County enters into an agreement with the owner that obligates the County to



assume responsibility for structural maintenance of the facility.

After the owner and the County have agreed that the County will assume responsibility for structural maintenance, the owner must record the easement and any other agreements executed in conjunction with the easement that are binding on subsequent owners of land served by the facility in the County land records. The owner must deliver a certified copy of each recorded document to the Department of Environmental Protection. Structural maintenance becomes the responsibility of DEP after the documents are delivered to that Department.

Underground structures (oil/grit separators, underground storage structures, underground sand filters and water quality inlets) must have been cleaned and inspected within three months of final recordation date of easement documents. Above ground structures (dry ponds, wet ponds, and surface sand filters) must have been cleaned and inspected within twelve months of final recordation date of easement documents.

Is the Water Quality Protection Charge deductible from my Federal Income Tax?

No. The Water Quality Protection Charge is not deductible from Federal or State Income Taxes.

Why do I have to pay a WQPC?

The County is required by the Montgomery County Code to provide stormwater management facilities and services that control the quantity and quality of runoff entering the streams and rivers in the County, including the structural maintenance of those facilities. Developers generally pay for construction. Funding is not provided by federal or state governments for the maintenance of these facilities.

Why do I have to pay a WQPC for my restaurant but the restaurant two blocks away is not charged?

Your restaurant drains to a Stormwater management facility that primarily drains residential properties. The other restaurant drains to a Stormwater management facility that drains only non - residential properties.

Do tax exempt properties (if they are considered an associated nonresidential property) have to pay?

Yes, because it is a charge, not a property tax. Property taxes are based on the assessed value of the property. The WQPC is assessed based on how much the property contributes to the amount of Stormwater runoff from the property.

If tax exempt properties have to pay, why don't government-owned facilities (that are considered associated non-residential properties) - Federal, state, or local?

All government properties are not charged. An exemption is provided to State and Federal properties under Maryland state law. However, the County is making every effort to enter into Memoranda of Understanding with these entities to get them to agree to pay.

I own a farm. Why is my agricultural property (if it is an associated nonresidential property) being assessed this charge?

Farmhouses are being treated as residential properties. You are being charged based on the impervious area of your farmhouse, driveway, etc., not your whole property area. Cropland and pastureland are not charged.

Will revenues be spent throughout the County?

The Stormwater maintenance program is County-wide. However, the Cities of Rockville, Gaithersburg, and Takoma Park will not be included in this program because they are already implementing a Stormwater maintenance program in their own respective cities. Takoma Park will continue to assess its own stormwater fee to its residents.

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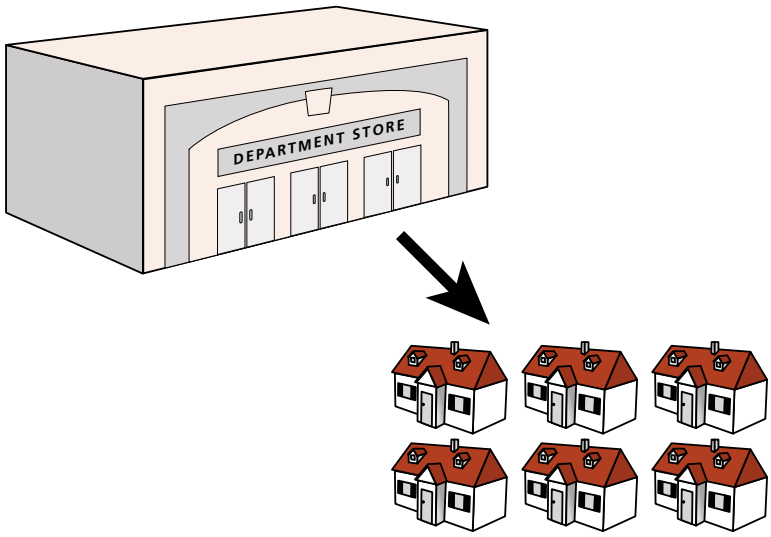
Multiple Equivalent Residential Units (ERUs)



How was the amount of impervious surfaces determined?

Impervious surfaces were determined by analyzing a statistically significant number of residential parcels in the geographic information system (GIS) available from Montgomery County and the Maryland-National Capital Park and Planning Commission (M-NCPPC).

Do I have to pay for any undeveloped properties that I own?

No, because there is no impervious area associated with your property.

Do I have to pay for any unoccupied developed properties that I own?

Yes, because that property contains impervious area.

My neighborhood roads have drainage problems. Who do I call to get some action on these problems?

You can call the County Department of Public Works and Transportation at (240) 777-7623.

Why do I have to pay when I do not have any drainage problems?

Everyone in the County benefits from the stormwater maintenance program. If stormwater runs off your property, the County must have a program and funding to manage the increase in runoff and pollutants.

What happens if I don't pay or I pay late?

Interest on the overdue payment accrues according to the same schedule and at the same rate charged for delinquent real property taxes until the owner has remitted the outstanding payment and interest. An unpaid Charge is subject to all penalties and remedies that apply to unpaid real property taxes. If the unpaid Charge becomes a lien against the property, the lien has the same priority as a lien imposed for nonpayment of real property taxes.

Can I appeal the charge?

If a property owner believes that a Charge has been assigned or calculated incorrectly, the property owner may petition the Director for an adjustment by submitting a written request in a form acceptable to the Department of Finance within 21 days after the property owner receives a bill for the Charge. The request must state the grounds for the property owner's petition.

Why is the stormwater management program not funded by tax revenues?

It has been funded in the past by tax revenues. However, the WQPC is fairer than a stormwater tax based on the assessed value for the real property, because: The charge is based on each property's actual contribution to stormwater runoff. Each property contributes a fair and equitable share towards the overall cost of the stormwater maintenance program.

For more information:

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Stormwater Facility Maintenance Program
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Technical FAQs

A. Ponds and Wetland Marsh

1. What is the recommended owner maintenance frequency?
Annually.

2. How often will DEP inspect facilities?
Triennially.

3. How much sediment may be accumulated within a dry pond, wet pond or wetland marsh before maintenance is required?
Dry pond - 30% of storage;
Wet pond - 50% of wet storage;
Wetland marsh - Maintain minimum 66% viable wetland;
Forebays - 50% of storage.

4. How much sediment may accumulate within the barrel or rip rap outfall before removal is required?
Barrel - 25% obstructed.
Outfall channel - 25% total obstruction of the barrel.
50% intermittent obstruction of the barrel.

5. How deep can water be ponded in an outfall barrel as a result of outfall channel blockage before hydraulic function is impaired?
No more than 25% of the barrel can be obstructed.

6. If native vegetation such as trees, brush, weeds and grasses have overgrown the bottom of the dry pond then should the vegetation be removed (other than the 25 ft. buffer zone)?
Only remove vegetation within 25 ft. of inlet structure. Also, evaluate for possible trash rack retrofit.

7. Should the mowing of primarily grass dry pond bottoms be required?
No, it may be done at owner's option, but not recommended.

8. When trees have grown up around or within the rip rap outlet below a barrel, should we remove those trees within twenty feet of the toe of the embankment, even if they are shading the rip rap?
Woody vegetation may not be planted on nor allowed to grow within 15 feet of the toe of the embankment and 25 feet of the principal spillway, unless otherwise specified by Maryland Department of the Environment (MDE) DAM Safety Division.

9. Assuming that accumulated sediments and vegetation need only be removed within twenty feet of the inlet structure, what form of transition to existing grade and slope stabilization need be utilized to convey water from the pond bottom to the low flow orifice?
Transition grading 20 ft. out from low-flow orifice invert to existing bottom elevation. Install rip - rap or matting with stabilization.

10. If cracks are found in a precast or poured-in-place riser, should the contractor perform the repair or should the owner be required to secure the services of professional engineer to make an evaluation and submit a repair for approval?
Obtain engineer's evaluation for structures with over 100 acres of drainage area or when structural failure is suspected. Otherwise, use standard methods for small on-site repairs.

11. If inspection discovers the existence of a pipe or precast riser joint that is not watertight, then should grouting be specified or should a professional engineer's evaluation and proposal be required?
Leaks in wet pond riser or barrels require an engineer's evaluation. Minor weeps may be pressure grouted using standard methods.

12. When should a metal riser and barrel be replaced?
Obtain engineer's evaluation when barrel perforations or other structural failures are noted. Minor riser perforations may be sealed by patching and recoating, provided that structural failure is not suspected.

13. What falls into the category of undesirable vegetative growth in a wetland marsh?
Cattails, multiflora rose, purple loosestrife and noxious weeds. Advise owner that removal is beneficial, but not required.

B. Oil Grit Separator

1. What is the recommended owner maintenance frequency?
Residential - 6 months
Commercial - 3 months

2. How often will DEP inspect facilities?
Once a year.

3. Is cleaning required before an inspection is made?
Yes, the separator must be dewatered and cleaned prior to the DEP inspection. Cleaning is necessary to inspect the down turned elbow, trash collection rack, structure joints, and other structural elements that are below the normal water level.

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4. If precast joints are not watertight, should repair be required?
Yes, clean and parge with non-shrink grout.

5. May we pump the "clean" column of water from oil and grit chambers into storm drains?
NO! All contents must be disposed of at the Oaks Sanitary Landfill Pretreatment Facility or other facility approved by MDE to accept liquid oil contaminated waste.

C. Infiltration Trench

1. What is the recommended owner maintenance frequency?
Annually

2. How often will DEP inspect the trenches?
Triennially

3. How do you determine if an exposed or buried infiltration trench requires maintenance?
If the surface aggregate appears clogged and the observation wells, if present, are continually holding water.

4. What is the recommended repair?
Replace the top layer of aggregate, fabric and inspect flow diverters for clogging or damage.

D. Sand Filters

Under Ground Sand Filters (UGSF) AND Above Ground Sand Filters (AGSF).

1. What is the recommended owner maintenance frequency?
Annually

2. How often will DEP inspect the structures?
Above ground - every three years
Underground - every year

3. What repairs will typically be required?
AGSF: Remove trash and leaves. Repair erosion and remove surface sediment deposits.
UGSF: Same as for oil grit separator.
Replace top layer of stone and top six inches of sand.

4. Is there any way to flush the system?
No flushing methods have proven to be effective. The aggregate must be replaced once it becomes clogged.

5. Is there any partial repair?
Surface Cleaning

E. Water Quality Inlets

1. What is the recommended owner maintenance frequency?
Residential - 6 months
Commercial - 3 months or as per the manufacturers recommendations

2. How often will DEP inspect the facilities?
Annually

3. How is the inspection conducted?
Same as for the oil grit separator including cleaning to allow below water level inspection. Also, the inspection port in bypass ring must be checked.

4. What clean out methods are acceptable?
All contents must be disposed of at the Oaks Sanitary Landfill Pretreatment Facility or other facility approved by MDE to accept liquid oil contaminated waste.

F. Underground Detention Structures

1. What is the recommended owner maintenance frequency?
Annually

2. How often will DEP inspect the structures?
Annually

3. What is recommended repair for separated metal pipe joints?
Replace if crushed, install internal bolted or welded band if marginal.

4. Any special requirements for concrete vaults?
Check for structural cracks, leaks, rust or staining. Clean trash racks, check for broken weir plates, bulkheads, and steps. Remove trash and accumulated sediment.

Caution: no one should enter these structures without the proper training, certification and permits for confined space entry. Entering confined spaces without these requirements is a violation of state law and could be dangerous or deadly.

Compiled by the Montgomery County Department of Permitting Services and the Department of Environmental Protection. For additional information contact the Division of Environmental Policy and Compliance 255 Rockville Pike, Rockville, Maryland 20850 or visit our website askDEP.com.

For more information:

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Common Stormwater Management Structures

Stormwater management is a process through which wet weather runoff is managed by constructing and maintaining facilities to infiltrate, filter, detain or retain the stormwater to remove pollutants, protect stream banks and prevent flooding. Managing stormwater through various techniques and practices is important to stop the damage which uncontrolled stormwater can do to streams.

Stormwater management structures have two basic functions: controlling the quantity of stormwater discharging, which helps to prevent flooding, stream bank erosion, and controlling the quality of stormwater discharging to our streams by removing pollutants in the water. Some structures provide both controls, while site constraints or other design considerations may require only one control.

Some of the most common stormwater structures installed in residential settings used to manage stormwater include infiltration trenches, sand filters, dry ponds, wet ponds, and oil/grit separators.

Infiltration Trenches

In Montgomery County, infiltration trenches are primarily used to filter pollutants and do not usually detain large quantities of stormwater. Some infiltration trenches are comprised of gravel filled trench, with a sand-filled bottom and a top layer of filter fabric. The top layer of fabric usually becomes clogged and will require replacement. Infiltration trenches allow stormwater to move slowly back into the ground removing pollutants as the water moves through gravel, sand, and finally the surrounding soil.

Infiltration trenches are not usually installed where large amounts of oil, grease, or other toxics may runoff with the stormwater and eventually contaminate the groundwater. Infiltration trenches installed at a time before adequate soil testing regulations existed may not function properly due to the poor absorptive abilities of the surrounding soil or because shallow groundwater saturates the soil beneath the trench, prohibiting the infiltration of stormwater. Monitoring wells are usually installed in the trenches to determine how well stormwater moves through the structure.

The gravel and sand in the trench can eventually become clogged and require replacement. Other maintenance items for infiltration trenches include removing vegetation that has encroached on the surface of the trench, and maintaining the cap on the observation well.

Sand Filters

Sand filters are stormwater facilities that use sand to filter and remove pollutants. Sand is used to provide a higher degree of filtering and pollutant removal as compared to infiltration trenches. Sand filters are generally classified as either: surface or underground.

Surface sand filters can range in size from 200 square feet to over 3/4 of an acre, have a sand depth of 18" comprising a bed or basin configuration and can vary depending on the drainage area they control. Surface sand filters have a tendency to clog if not maintained on a routine basis. The surface of the filter should be raked four times a year to break up any surface crust. Algal build up can significantly contribute to the premature failure of the structure. Algal growth is usually attributable to excessive application of lawn fertilizer during the wrong time of the year. Total replacement of the sand will be required and replacement time will vary depending on

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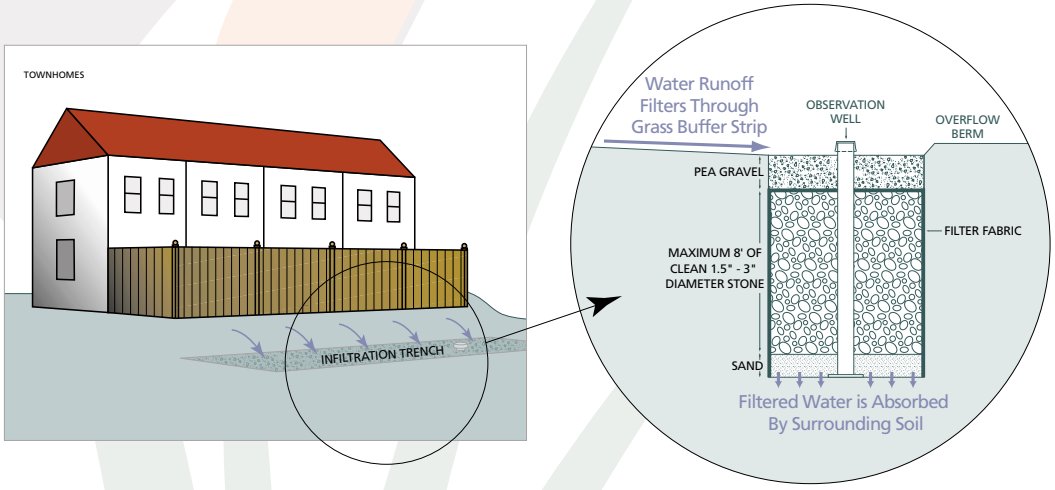
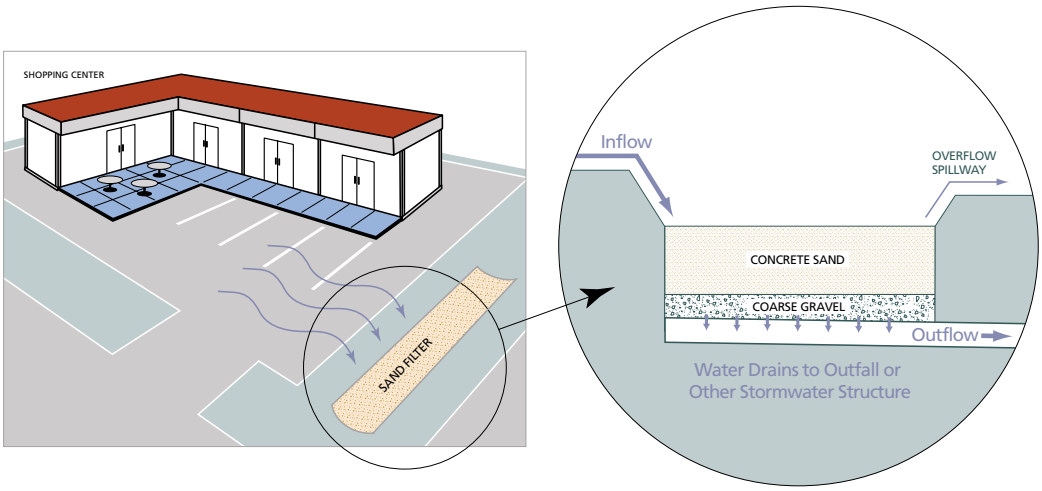


Typical Infiltration Trench

maintenance and pollutant input. Some surface sand filters have an underdrain that discharges stormwater when the filter becomes clogged, usually when the entire sand needs to be replaced. They are usually installed in conjunction with other stormwater management facilities in order to provide advance pollutant removal.

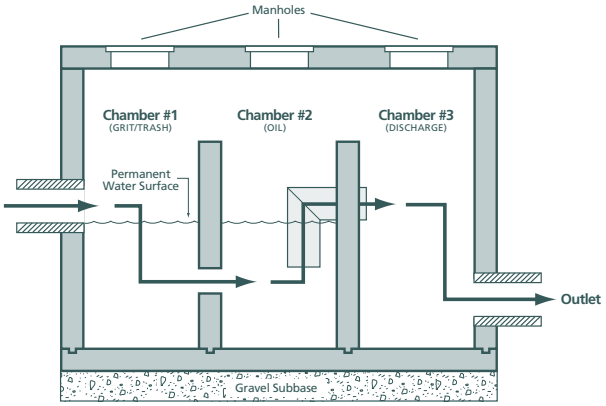
Underground sand filters are usually installed in commercial settings such a gasolene station where space is limited and enhanced pollutant removal is necessary. They are located under the parking lot or pavement and are installed with an oil/grit separator for advanced pollutant removal. They are smaller than surface sand filters, have about 18" of sand, and have varying design features. Because of the commercial activity onsite, clogging due to automotive fluids and other pollutants may necessitate the frequent replacement of the sand.



Typical Sand Filter

Oil/Grit Separators

Oil/Grit Separators are underground concrete storage structures that are designed to remove oils and other automotive fluids and sediment from stormwater. The structure is composed of a sediment-trapping chamber, an oil separation chamber and a third chamber that discharges the water. These structures require annual pumping and cleaning. Studies have found that these "older" designed structures are not very efficient at retaining and separating pollutants.



Oil/Grit Separator

What You Can Do

Infiltration trenches, sand filters, and oil/grit separators are just a few of the common structures designed to help clean stormwater. To keep these structures functioning properly, it is important to perform simple maintenance tasks.

These may include preventing grass from growing on the trenches and above ground filters, and keeping debris from clogging the inlets to oil/grit separators. Prevent contamination by properly storing pesticides, used oil, pool chemicals, or other potential pollutants at a suitable distance away from infiltration trenches other stormwater structures.

In considering additions to parking lots, buildings or other amenities, such as tennis courts or a storage shed, be certain not to place these facilities over the stormwater structures or in the actual drainage path. Poorly located sheds or otherwise altering the drainage flows can cause stormwater to run off and cause erosion at other locations on the property.

For assistance and more information such as proper storage techniques and information about stormwater facility maintenance visit the DEP website: **stormwater.askdep.com**

For more information:

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MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Stormwater Ponds

Dry Ponds

Dry ponds or detention ponds are commonly used stormwater management structures which detain the stormwater for a period of about 48 to 72 hours after a storm and slowly discharge the water over this time. The slow metering discharge of the water replaces the gushing rush of uncontrolled stormwater that can tear down stream banks and cause flooding. During a heavy rainfall dry ponds will fill and resemble ponds that have a permanent pool but empty completely after the storm is over.

Dry ponds range in size from a few thousand square feet to several acres, depending on the drainage area they control. They typically consist of a grass interior basin with a flow channel, dam embankment and a control structure.

Inspection of dry ponds in the county has revealed that the most common repair item is the presence of trees and vegetation on the dam embankment. Trees are prohibited on the dam embankment because they could be blown over and cause weakening of the structural integrity of the dam and cause flooding below. Another common maintenance concern for dry ponds is that the low flow orifice on the control structure becomes clogged and the pond retains water on a permanent basis. This condition reduces the stream bank protection measures of the pond by allowing the water entering the pond to discharge directly out the control structure without being detained. Routine trash removal from the pond basin will prevent the orifice from becoming clogged, thereby ensuring stream bank protection.

Wet Ponds

Wet ponds or retention ponds are the most easily recognizable stormwater management structures installed in residential areas of Montgomery County. Wet ponds have a permanent pool of water, which enhances its pollutant removal capabilities. Storm event runoff enters the pond and excess water is discharged at a controlled rate by a weir in the control structure.

Wet ponds typically occupy acres of land area, depending on the drainage area served, and have a control structure which regulates the discharge to provide a constant flow of water to the stream. Wet ponds are used because of their efficient pollutant removal capabilities. Pollutants such as sediment, nitrates and phosphates from fertilizers, and even automotive related heavy metals such as copper and lead are significantly reduced in stormwater discharges due to the long retention time in wet ponds.

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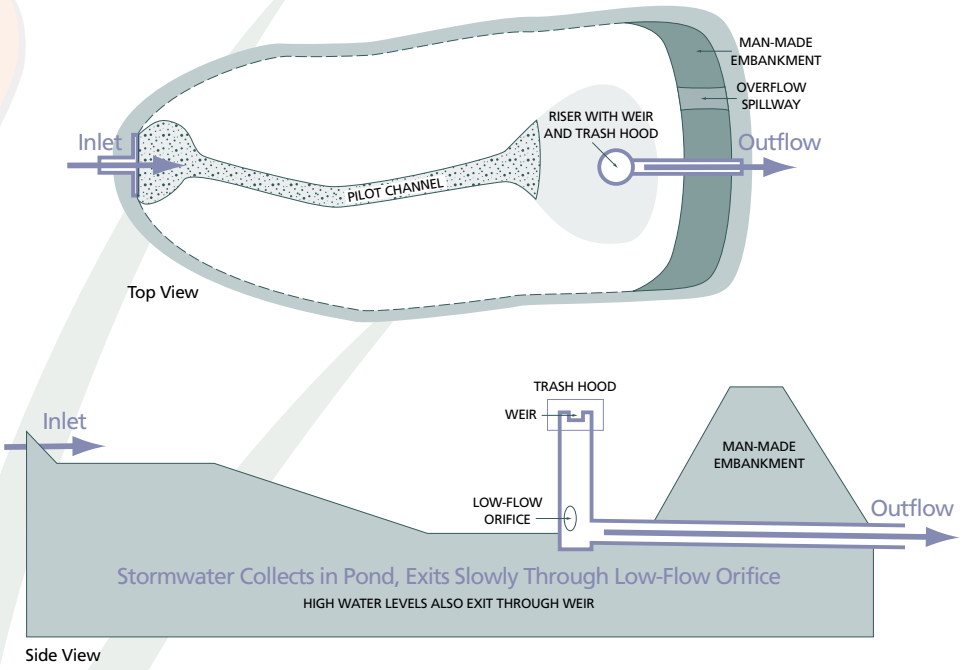


Typical Dry Pond

Because of the permanent pool of water, the pond's riser structures are subject to additional wear and tear due to water pressure. Leaking riser and barrel joints are some common repair areas for these ponds. Advanced pollutant removal capabilities means that sediment and "muck" will have to be removed from the pond. Routine inspection is imperative to determine that these ponds are safe and continue to function as important water quality protectors.

During the heat of the summer wet ponds can look green and slimy due to excessive algal bloom, usually the result of excess lawn fertilizer and pet waste being washed into the pond from the surrounding neighborhoods during spring rains.

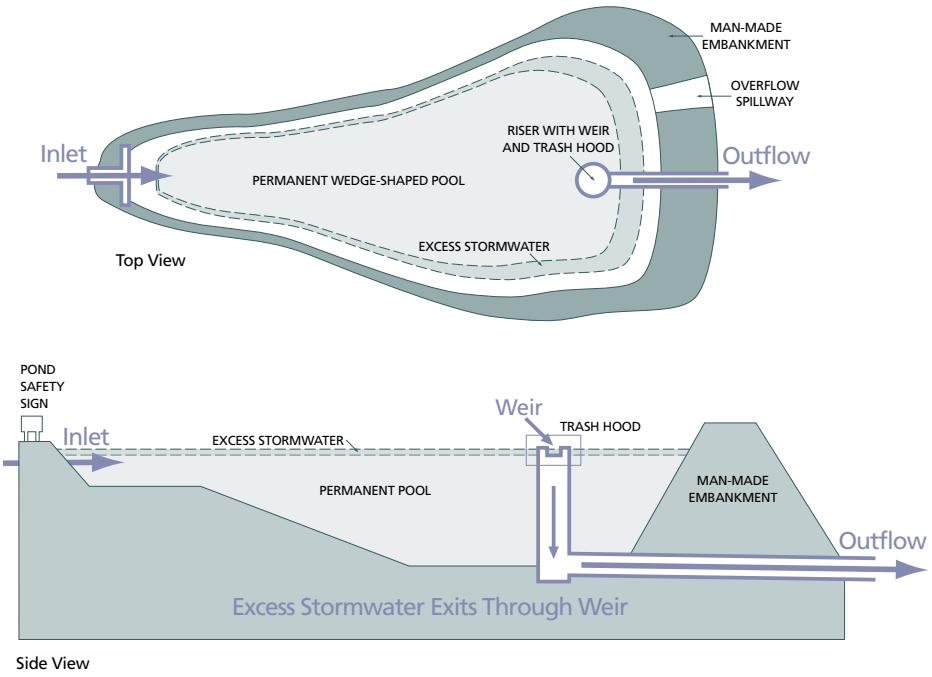
What You Can Do

Stormwater facilities must be respected and maintained to prevent flooding, stream erosion, costly repairs, and a decline in the health of our waterways and communities.

Otherwise neglected ponds can be developed into magnificent birding and wildlife viewing areas by making repairs which could include colorful native plantings. Neighborhoods can become safer, property values increased, and future repair costs avoided by implementing maintenance programs which involve the whole community in the care, enjoyment, and protection of their local watershed.

By enacting the Water Quality Protection Charge, Montgomery County and DEP have made a commitment to recognize that maintenance of stormwater facilities is a benefit to all citizens — and to the environment. But Montgomery County and DEP cannot do it alone. We need your help. Performing aesthetic maintenance by cutting grass around the pond and regular trash removal not only benefits your neighborhood but improves water quality and the quality of life for everyone.

For assistance and more information such as planting techniques and information about stormwater facility maintenance visit the DEP website: **stormwater.askdep.com**



Typical Wet Pond

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